***Massachusetts Department of Public Health, Bureau of Infectious Disease and Laboratory Sciences***

**Summary for Barnstable County, Massachusetts, 2021**

Barnstable County is a county in the Commonwealth of Massachusetts, established in 1685. Barnstable county consists of Cape Cod and associated islands. In 2020, the population was 228,996 (U.S. Census Bureau, 2020\*).

**Chlamydia**

Chlamydia is the most frequently reported sexually transmitted infection (STI) both in the Commonwealth and nationally.

**Since 2011, there has been an overall increase in chlamydia cases statewide and in Berkshire County, with the exception of 2020 due to COVID-19**§. In 2021, the county rate was 220.5 per 100,000, while the statewide rate was 382.8 per 100,000. These can be compared to the national rate of 495.5 per 100,000.‡

**The county incidence rate among women remained higher** compared to men. In 2021, the incidence rate of chlamydia among women in Barnstable County was 230.6 per 100,000 and 207.6 per 100,000 for men.

Incidence rate of reported chlamydia cases per 100,000 population by gender, Barnstable County, MA, 2011-2021.

Graph above depicts chlamydia rates (per 100,000) in MA and Barnstable County by gender between 2011 and 2021. There are four lines: (1) MA rates begins at 345.2 and finishes at 382.8; (2) Barnstable County rates begins at 196.5 and finishes at 220.5; (3) Barnstable women rates begin at 263.0 and finishes at 230.6; (4) Barnstable men rates begin at 120.6 and finish at 207.6.


Data are current as of 10/24/2022 and are subject to change.

Population denominators: Strate S, et al. Small Area Population Estimates for 2011 through 2020 report, Oct 2016.

Data source: Massachusetts Department of Public Health/Bureau of Infectious Disease and Laboratory Sciences/Division of STD Prevention

**The chlamydia statewide incidence rate is highest among young adults**. In 2021, the rate of chlamydia reached 1,914.7 per 100,000 among 20 to 24-year-old women in Barnstable County.

Provincetown, a town at the northern tip of Cape Cod, has the highest incidence rate of chlamydia among all cities and towns in Barnstable County (2,238.0 per 100,000).

**Gonorrhea**

Gonorrhea is the second most frequently reported STI both in the Commonwealth and nationally.

**Since 2011, there has been an overall increase** while Barnstable County did not experience an increase until 2016. In 2021, the county rate was 78.2 per 100,000, while the overall state rate was 115.2 per 100,000.These can be compared to the national rate of 214.0 per 100,000.‡

**The county incidence rate among men remained higher** compared to women. In 2021, men accounted for 79.2% of all gonorrhea cases in Barnstable County with a rate of 129.0 per 100,000, about four times that of women (30.9 per 100,000).

Incidence rate of reported gonorrhea cases per 100,000 population by gender, Barnstable County, MA, 2011-2021.

Graph above depicts gonorrhea rates (per 100,000) in MA and Barnstable County by gender between 2011 and 2021. There are four lines: (1) MA rates begins at 35.4 and finishes at 115.2; (2) Barnstable County rates begins at 34.3 and finishes at 78.2; (3) Barnstable women rates begin at 29.2 and finishes at 30.9; (4) Barnstable men rates begin at 39.9 and finish at 129.0.


Data are current as of 10/24/2022 and are subject to change.

Population denominators: Strate S, et al. Small Area Population Estimates for 2011 through 2020 report, Oct 2016.

Data source: Massachusetts Department of Public Health/Bureau of Infectious Disease and Laboratory Sciences/Division of STD Prevention

**In 2021, the number of cases and incidence rate of gonorrhea in Barnstable County was highest among 30 to 34-year-olds** (382.6 per 100,000).

Provincetown had the highest incidence rate of gonorrhea among all cities and towns in Barnstable County (2,183.4 per 100,000).

Incidence rate of reported gonorrhea cases per 100,000 population by gender and age, Statewide, MA, 2011, 2021.

This graph shows the highest gonorrhea rate among men in 2011 was in the 20-24 year-old age group, which shifted to the 25-29-year-old age group by 2021. Among women, the age group with the highest gonorrhea rate was 20-24-year-olds during 2011 and 2021. 


Data are current as of 10/24/2022 and are subject to change.

Population denominators: Strate S, et al. Small Area Population Estimates for 2011 through 2020 report, Oct 2016.

Data source: Massachusetts Department of Public Health/Bureau of Infectious Disease and Laboratory Sciences/Division of STD Prevention

**Early Syphilis◊**

Early syphilis has been on the rise in the Commonwealth and nationally since the early 2000s.‡

**Since 2011, the rate of reported early syphilis in Barnstable County has increased** **with a peak in 2016.** In 2021, the county rate was 12.2 per 100,000, while the statewide rate was 19.2 per 100,000.These can be compared to the national rate of 31.8 per100,000.‡

**In 2021, the county rate of reported early syphilis among men was much higher** compared to that among women. Men accounted for 92.9% of all early syphilis cases in Barnstable County with a rate of 23.8 per 100,000, more than 10 times that of women (1.7 per 100,000).

Incidence rate of early syphilis cases per 100,000 population by gender, Barnstable County, MA, 2011-2021.

Graph above depicts syphilis rates (per 100,000) in MA and Barnstable County by gender between 2011 and 2021. There are four lines: (1) MA rates begins at 7.6 and finishes at 19.2; (2) Barnstable County rates begins at 7.9 and finishes at 12.2; (3) Barnstable women rates begin at 0.0 and finishes at 1.7; (4) Barnstable men rates begin at 16.5 and finish at 23.8.


Data are current as of 10/24/2022 and are subject to change.

Population denominators: Strate S, et al. Small Area Population Estimates for 2011 through 2020 report, Oct 2016.

Data source: Massachusetts Department of Public Health/Bureau of Infectious Disease and Laboratory Sciences/Division of STD Prevention.

**In 2021, the highest incidence rate of early syphilis was among 30 to 34-year-olds** (60.4 per 100,000).

Provincetown had the highest incidence rate of early syphilis among all cities and towns in Barnstable County (272.9 per 100,000).

Incidence rate of reported early syphilis per 100,000 population by gender and age, Statewide, MA, 2011, 2021.

This graph shows the highest early syphilis rate among men in 2011 and 2021 was in the 30-34-year-old age group. Among women, the age group with the highest early syphilis rate was the 25-29-year-olds in 2011 and 2021.


Data are current as of 10/24/2022 and are subject to change.

Population denominators: Strate S, et al. Small Area Population Estimates for 2011 through 2020 report, Oct 2016.

Data source: Massachusetts Department of Public Health/Bureau of Infectious Disease and Laboratory Sciences/Division of STD Prevention

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\* 2020 population estimates were used to calculate 2021 disease rates throughout this report because 2021 population estimates had not been released at the time this report was published.

‡ Source: CDC: Sexually Transmitted Disease Surveillance, 2021.

◊ Early syphilis is defined as primary, secondary and early syphilis not diagnosed in the primary or secondary stages within one year of infection.

§ Please note the impact of the COVID-19 pandemic on infectious disease screening, treatment, and surveillance in the interpretation of 2020 and 2021 data.

**2021 Statewide Massachusetts**

Chlamydia cases have increased by 38% from 2011 to 2019 and decreased by 22% in 2020 before increasing by 9% in 2021. This is possibly due to factors such as increased service utilization after health care clinics re-opened following the end of the COVID-19 public health emergency.

Gonorrhea cases have increased 245% from 2011 to 2021 and was reported primarily among men.

Early syphilis cases have increased 170% from 2011 to 2021. From 2016 to 2021, a range of 31% to 39% of early syphilis cases were co-infected with HIV. In 2019, 2020, and 2021 congenital syphilis cases numbered 9, 10, and 9, respectively, after remaining between 0 and 4 from 2011 to 2018.